



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,064	12/11/2000	Johan Bennarsten	P00,1832	2760

7590

09/23/2002

Schiff, Hardin & Waite  
Atten: Patent Department  
6600 Sears Tower  
Chicago, IL 60606-6473

EXAMINER

MENDOZA, MICHAEL G

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/733,064	<b>Applicant(s)</b> BENARSTEN ET AL.	
	<b>Examiner</b> Michael G. Mendoza	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:  
112. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: the specification fails to teach what the reference number 112 stands for.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Winn et al. 5,092,326.
5. As to claim 1, Winn et al. teaches a high-frequency oscillator ventilator comprising: a first gas conduit having an opening adapted for gas connection with a patient's airways and a bias gas flow inlet and a bias flow outlet disposed to define

therebetween a flow path for a bias gas within the first conduit; an oscillator for inducing pressure oscillations in gas within the first conduit to move the gas along a path intersection the flow path for a bias gas alternately into and out of the opening at a predetermined high-frequency, the oscillator comprising an arrangement for alternately introducing a volume of additional gas into and withdrawing at least the volume of gas from the first gas conduit to induce the pressure oscillations (col. 4, lines 48-59; see figures).

6. As to claim 2, Winn et al. teaches an HFO ventilator as claimed in claim 1 wherein the arrangement in the oscillator is disposed to introduce the volume of additional gas into the first gas conduit to intersect the bias flow path at a location proximal the opening (col. 4, lines 48-59).

7. As to claim 3, Winn et al. teaches an HFO ventilator as claimed in claim 1 wherein the arrangement comprises a second gas conduit arranged to introduce additional gas into the first gas conduit in a direction toward the opening, a gas pulse generator connected (see figures) to the second conduit which introduces a train of gas pulses into the second conduit with each pulse contain the volume of additional gas and being separated from a next pulse in the pulse train by an inter-pulse interval and an extraction device which withdraws gas from the first gas conduit at least in each inter-pulse interval (col. 9, lines 35-40).

8. As to claim 4, Winn et al. teaches an HFO ventilator as claimed in claim 3 wherein the extraction device is in gaseous communication with the second gas conduit to withdraw the gas therethrough (see figures).

9. As to claim 5, Winn et al. teaches an HFO ventilator as claimed in claim 3 wherein the extraction device is in gaseous communication with the first gas conduit via a third gas conduit through which the extraction device withdraws the gas (see figures).

10. As to claim 6, Winn et al. teaches an HFO ventilator as claimed in claim 3 wherein the extraction device is in gaseous communication with an end of the first gas conduit distal the opening (see figures).

11. As to claim 7, Winn et al. teaches an HFO ventilator as claimed in claim 6 wherein the extraction device is further co-operatively in gaseous communication with the bias flow outlet to vent the withdrawn gas therethrough (see figures).

12. As to claim 8, Winn et al. teaches an HFO ventilator as claimed in claim 3 wherein the extraction device comprises a size variable gas holding volume in gaseous communication with the first gas conduit, the gas holding volume being defined at least in part by a wall section reciprocally moveable in time relationship with the operation of the gas pulse generator to alternately increase the size of the gas holding volume to withdraw gas from the first conduit at least during the inter-pulse interval and to decrease the size of the gas holding volume to vent the withdrawn gas during the next gas pulse of the pulse train (col. 4, lines 48-59).

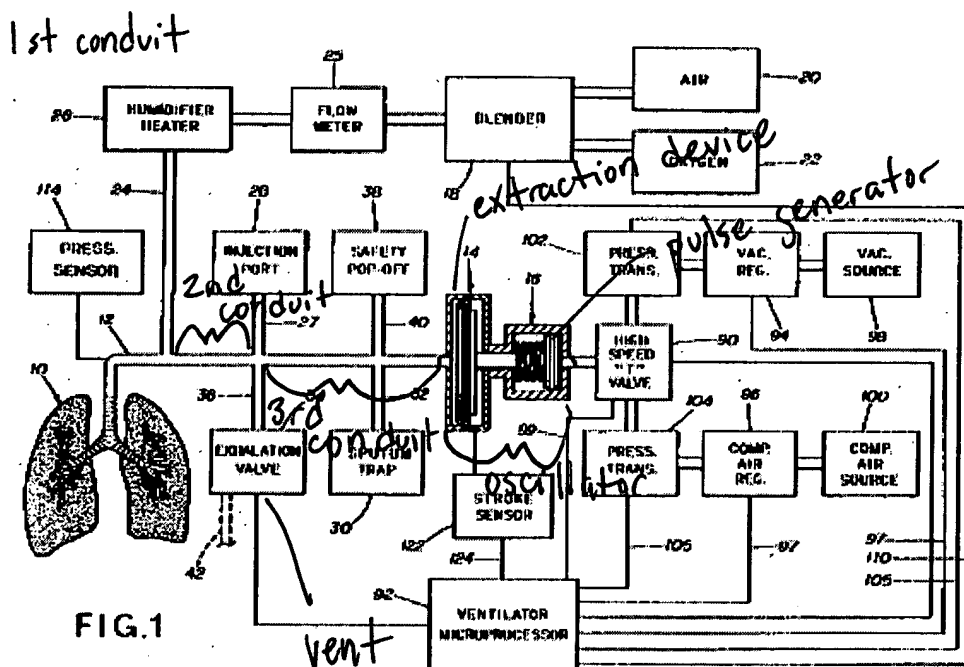
***Claim Rejections - 35 USC § 103***

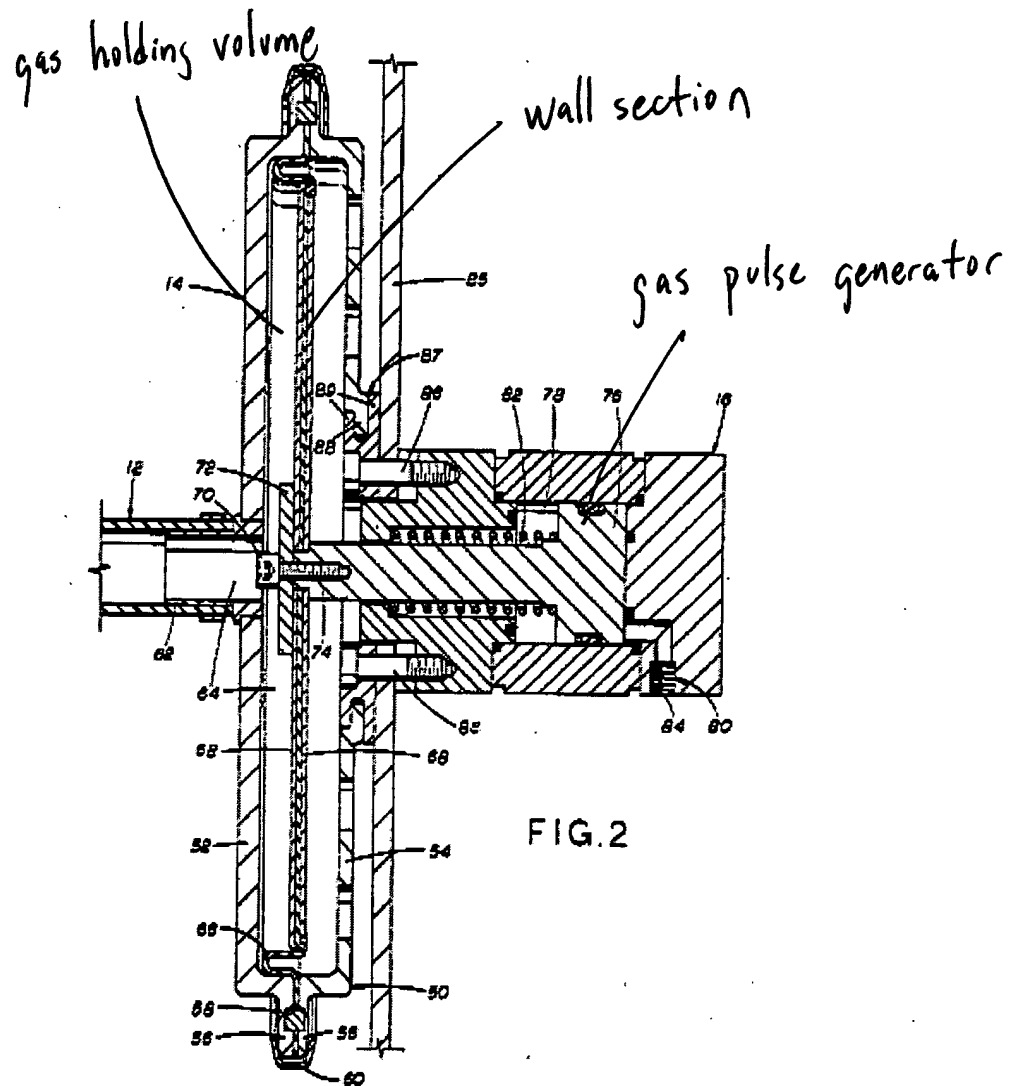
13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winn et al.

15. As to claim 9, Winn et al. teaches an HFO ventilator as claimed in claim 1. It should be noted that Winn et al. fails to teach wherein the oscillator introduces a volume of gas of between one and four milliliters per kilogram weight of a patient as the volume of additional gas. However, Winn et al. does teach an HFO ventilator that is adapted for operating within a wide range of parameters. Therefore it would have been obvious to one of ordinary skill in the art to arrive at the particulars as recited in the above claim depending on the needs of the user through routine observation and experimentation.





**Contacts**

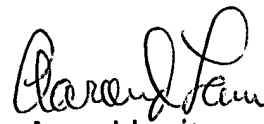
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (703) 305-3285. The examiner can normally be reached on Mon.-Fri. 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aaron Lewis can be reached on (703) 308-0716. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4520 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



MM  
September 17, 2002



Aaron J. Lewis  
Primary Examiner